OLDEST BEE PAPER IN AMERICA

THE AMERICAN BEE JOURNAL

ESTABLISHED IN 1861

DEVOTED EXCLUSIVELY TO PROGRESSIVE BEE CULTURE.

Vol. XVIII. Chicago, Ill., November 15, 1882. No. 46.

THE AMERICAN BEE JOURNAL

Published every Wednesday by

THOMAS G. NEWMAN,

EDITOR AND PROPRIETOR,

925 WEST MADISON ST., CHICAGO, ILL.

At $2.00 a Year, in Advance.

☞ Any person sending a club of six is entitled to an extra copy (like the club) sent to any address desired. Sample copies furnished *free*.

George Neighbour & Sons, London, England, are our authorized agents for Europe.

Postage to Europe 50 cents extra.

Entered at Chicago post office as second class matter.

TOPICS PRESENTED THIS WEEK.

The Coming Winter.

We are all very much interested in the question now so often asked, viz.: "What is to be the general character of the ensuing five winter months?" An exchange very truthfully remarks that whether the comet is causing us trouble or not, certain it is that this planet of ours is very much disturbed of late. Our own cyclone period had scarcely subsided in the West when the eastern States were visited with wind storms and flooded with heavy rains. Then the weather took a jump to the Phillipine Islands, where 60,000 persons were rendered homeless in less than an hour; then another jump to Cuba. Now, the Spanish dominions are again visited, this time by a gale on the southern coast, which has done much damage to shipping and caused the death of several fishermen. In England, the inundations of the Thames valley have flooded the suburbs of many towns, impeded traffic and done immense damage to property. In France the river Seine is rapidly rising. Floods have stopped traffic between Marseilles and Cannes on the Mediterranean, and the Austrian empire is also to be counted a severe sufferer from these convulsions of nature.

On another page we have quoted the weather predictions of Mr. R. Mansill, of Rock Island, Ill., as given by him in his "Perhelia Crisis," a new work on meteorology, which will be read with interest.

According to Mansill, the winter will be an unusually mild one, but the spring will be backward and cold. June will open the summer with fine weather, but from July to September it will be cold, below the average temperature. These predictions are given for what they are worth, but should serve to warn bee-keepers generally to prevent the spring dwindling of bees, by their careful and wise protection, and be ready with populous colonies for the honey-flow in June; then, whether they get much more or not, they will be sure of so much honey, and can cheerfully take the risk for the future.

Up to the present time the weather generally has been warm, with but little wind or anything to indicate winter, while by this time, two years ago, everything was frozen up, and winter had come in good earnest.

Instincts of Bees.—At a meeting of the British Bee-Keepers' Association, held at London, Oct. 18, 1882, after the routine business, Mr. G. D. Haviland read an interesting paper on "The Social Instincts of Bees: Their Origin by Natural Selection." Mr. Haviland treated his subject in a masterly manner, and was heartily applauded at its close. There was a large attendance of members, including several ladies. The Rev. F. T. Scott presided. The Honorary Secretary announced that Sir John Lubbock would have taken the chair on this occasion, but a prior engagement prevented him from doing so.

☞ Mr. C. H. Lake has sent us a photographic view of his bee tent, used at the various Bee and Honey Shows during the past summer. We have given it a place in the BEE JOURNAL Album.

☞ Renewals may be made at any time; but all papers are stopped at the expiration of the time paid for, unless requested to be continued.

Statistical Information—Suggestions.

In reference to the committee appointed by the late meeting of the North American Bee-Keepers' Association, at Cincinnati, O., we have received the following letter from ex-President Cook, being a duplicate of one he has sent to the New Jersey State Bee-Keepers' Association:

At the recent very interesting meeting of the North American Bee-Keepers' Society, there was a very full discussion of the importance of more full and accurate statistics of the present condition of Apiculture in the United States, both as to the number of colonies of bees and the honey product. It was thought that nothing would so aid our art as such information. The magnitude of the business once known, and it would be better appreciated as one of the important industries of the country. As a result of the discussion, a committee was appointed to take the subject into consideration, and act, if possible, so as to accomplish the result.

The committee were: Messrs. C. C. Miller, T. G. Newman and A. I. Root. All of the money in the treasury of the Society was pledged to the accomplishment of this result.

Of course no one will fail to recognize the value of such statistics; but the possibility of gathering them is a question of reasonable doubt. I have thought of a plan which I believe may be made practicable; I wish to suggest it for discussion, in hope that it may be improved, or a better plan suggested.

The plan is that the Committee prepare blanks, suggesting the desirable facts, and that these be sent to an enterprising bee-keeper in every town or county of the United States, upon application, and that said person see that the supervisor of his town or the supervisors of his county have these blanks, and that said supervisor be pledged to get the desired facts as he takes the assessments. It would seem that there must be such a bee-keeper in every county, if not in every township. These could be reached through the bee periodicals and other journals. These blanks, when once filled, could be gathered by the same bee-keeper, and sent to the committee. I have already asked several supervisors in this State of the practicability of this scheme, and all report favorably. It seems to me the information could be made more correct and be secured more cheaply in this way than in any other. In fact, I can see no other way to compass it. I hope that the matter will be thoroughly discussed by you, and that we shall get some practical results as the outcome of your deliberations. A. J. Cook.

We cheerfully give place to the above suggestion of Prof. A. J. Cook, and, by the time the committee shall assemble, organize and prepare to act, the members will, no doubt, have given them due consideration, and be then and there enabled to decide upon a plan of operation—if they undertake this work.

Incidentally, we will remark that we do not think that "supervisors" (more generally called "assessors"), will take any trouble to get the "desired facts," unless they are well paid for it. Our experience with such men gives us no confidence either to ask or expect anything of them above or beyond the regular routine of their duties. There are some who would be obliging enough to do it—but we fear the great majority would either absolutely refuse to do so, or else lightly promise, with the intention of forgetting to fulfill their promise, "made just to get rid of it," or, in some other way, fail to obtain the desired information.

Unless the bee-keepers, individually, can be enlisted in the work, and for the sake of benefitting themselves and aiding the honey markets generally throughout the country, we fear it will be a failure.

We rather prefer the plan suggested by Mr. J. S. Terrill, P. M., of Ridgeville, O., at the National Convention, which is described thus by the Secretary of the Convention: "He mailed postal cards to every post office in the county, asking the postmaster to write on it the names of the bee-men at his office. The cards were all addressed to himself, so the postmaster had nothing to do but to put it on in pencil, and drop the card in the mail. Now, by mailing similar cards to all the bee-men, with a printed request, and blanks to fill out, he got almost a correct report of all the bees in Lorain county, and of the honey raised. This list of names he considers worth all they cost, for calling a convention or any other purpose pertaining to the industry."

The Vice Presidents of each State could appoint some bee-keeper in each county to act, in the way that Mr. Terrill did, and thus obtain, with some degree of absolute certainty, the desired information. This he could transmit to the State Vice President, and he to the Chairman of the Committee on Statistics, to be tabulated and published. But the great drawback to all this is the *cost*. Perhaps no one has even thought of that; we have, however, made a careful estimate of the cost of postal cards, envelopes, circulars, etc., and at the least calculation, such alone will cost $4,000, even if the labor of the committee be *given* to the cause.

Prof. Cook remarks that "all of the money in the treasury of the Society was pledged to the accomplishment of this result." That amount is, we think, less than $150—where is the small balance of $3,850 to come from? Is it expected that the committee shall make up the small deficiency? As it is only about $1,300 for each member of the committee, for the honor, work and abuse combined, we presume they will, cheerfully—"go home and think about it?"

Bees and Honey at Virginia State Fair.—We notice by the Richmond, Va., papers that there was a very creditable display of bees and honey at the Virginia State Fair. The daily papers at Richmond contained the following notices of it on Nov. 3, 1882:

The exhibit of the Sunny Side Apiary, of Baltimore, deserves more than what the newspapers have said about it. Mr. C. H. Lake is the manager, and was very busy yesterday showing the workings of his new hives, which are considered by bee keepers to be the best made. Mr. Lake exhibited Cyprian, Holy Land or Syrian, and the two species of Italian bees. From one colony 220 pounds of honey was obtained in six weeks.—*Daily Whig.*

One of the attractions at the Fair is the exhibition of Mr. Charles H. Lake, manager of the Sunny Side Apiary at Baltimore, Md. This gentleman has a large tent, under which he shows a case of over two hundred pounds of honey made from one hive; has several colonies of Italian bees. one of Cyprian bees, and also other foreign bees. Every appliance used in this business is shown by Mr. Lake. He is running seven hundred hives this season.—*Daily Dispatch.*

☞ We have received, from the publishers, a copy of Edwin Alden & Bro.'s American Newspaper Catalogue, including lists of newspapers and magazines published in the United States and the Canadas; together with the population of the Cities, Towns, Counties and States in which they are published, and many other items of interest. It is a large volume of over 700 pages, and is nicely bound in cloth. There are in America 2,945 counties in which papers are published—and the whole number of papers published is stated in this catalogue to be 12,158. It is a very useful book. It is published by Edwin Alden & Bro., Cincinnati and New York.

☞ New subscribers for the Weekly Bee Journal for 1883, can obtain all the rest of the numbers for this year by sending $2 to this office.

Weather Predictions for 1883.

Mr. Richard Mansill, of Rock Island, Ill., has published a work called the "Perihelia Crisis." In it we find the following concerning the weather from now until the end of next year. Concering December, he remarks as follows:

The world must expect to hear of considerable wild earth disturbances from about the 6th to the 14th of December of this year, 1882, or at about the time of Venus' transit, Dec. 6. At its transit, Dec. 8, 1874, there occurred a great storm on the Baltic sea, that made a thousand people homeless; many vessels and lives were lost on the British coast on the 9th; a severe earthquake occurred at New York and along the Hudson on the 10th, and coinciding with these occurred the breaking out of the volcanic ash showers of Iceland.

He gives the following predictions for each month of the next year:

January—the temperature is likely to average above the mean of the season during January, both in Europe and in the United States—or between latitudes 35 and 37 degrees north latitude in the United States and parts of Canada, and between latitudes 35 and 55 degrees north latitude in Europe. There may be sharp depression of temperature between the 9th and 12th, and between the 22d and 24th, together with storms, and again about the 29th.

February—The temperature of February is also likely to average a little above the mean of the season—with sharp depressions, perhaps below the mean, from the 16th to the 12th, and from the 20th to the 25th, accompanied with severe snow storms in the more northern districts, and heavy rains and some lightning in southern sections.

March—The temperature of March is not expected to average above the mean of the season, neither is it likely to be an unusually stormy month. It will not probably run to great extremes of temperature, either of elevations or depressions. It may be somewhat stormy from the 8th to the 12th, and from about the 22d to the 25th.

April—The temperature of April will probably average below the mean of the season. It will also be a more stormy month than March, with elevations and depressions of temperature greater than those of March, for the season.

May—The temperature for May will probably average below the mean of the season. It is not expected to be quite as stormy a month as April.

June—The temperature of the first half of June will probably average about the mean of the season, and the last ten days below, with strong storms between the 4th and 9th.

July—The temperature for July will probably average considerably below the mean of the season, both in Europe and the United States. In fact, July is expected to be the cold, stormy month for the season of 1883, as that of May, 1882, was (as pointed out by this theory) for that year.

August—The temperature is also likely to average below the mean of the season during August, but perhaps it will not be quite so stormy as July.

September—The temperature for September will probably average a little below the mean of the season in the United States and Europe, though the temperature should begin to improve toward the latter part of this month. There should not be an excess of storms during this period.

October—The temperature for October will likely average a little above the mean of the season. The month will be somewhat stormy, or more so than September.

November—The temperature will likely average above the mean of the season during November, in the United States and Europe. The month will have a full average of storms, but not perhaps quite as many as October.

December—The temperature for December is likely to average considerable above the mean of the season in the United States and Europe. In fact, it is likely to be a pleasant winter month, with less than an average of severe storms.

We will probably have this year, (1882) a warm autumn and mild winter, on the average, continuing up to the 1st of January.

From the above monthly statements or forecasts of the weather temperature of the year 1883, it may be said that we are expecting to experience a moderately mild winter (1882-3), followed after March by a long, cool spring and summer again during 1883—while from this prospect it may be inferred that a mild winter north and south brings about a sort of an unusually early spring in southern latitudes, or latitudes lying between 33 and 38 degrees in the United States.

Swarming vs. Dividing.

Very often we have enquiries, asking our advice as to whether it will pay better to divide, for increase, than to trust to natural swarming; we, invariably, answer by saying that it saves time and money, and gives more pleasure and profit to the bee-keeper to divide for increase. We have just noticed the experience of Mr. W. W. Dunham, of North Paris, Me., as given in *Home Farm*, and append it, to illustrate in a practical way, the points of pleasure and profit. He says:

On July 11, my first swarm came off, at about seven o'clock in the morning, and as it was so early in the day, it was by the merest chance that we discovered them. It was a nice large swarm and I was on hand with all the pride of a young bee-keeper, to hive them, but after circling around in the air for some time they arose up over my house and started off. I did not feel like giving them up in that quiet manner and started after them. I had two men at work for me who also started in pursuit. We soon got left behind but we kept on in the direction they had taken, as near as we could through fields, pastures, meadows of stout, wet grass, through brooks, bushes, brush and mud until we came to a large piece of woods, certainly a mile and a half from home. We then separated and began to hunt for the bees, and after hunting a long time one of the men heard them up overhead, and we at last discovered them clustered out on a limb of a rock maple tree about fifty feet from the ground. I then returned home and got a line, saw, rope, etc., and prepared to hive my bees. One man climbed the tree with the rope, passed it around the limb the bees were on, and up through another crotched one, dropping the end down to the ground. I then took hold of the rope while he sawed the limb off and steadied it down as I lowered away on the rope, and to my gratification we soon had them in the hive, where I let them remain until evening when I took a hand with me and went after them, bringing them home lashed between two poles.

Now, I just saved my swarm of bees, but after spending three half days work, besides part of the night, I concluded that it was rather an expensive way of swarming bees and that another year I would control the swarming myself. I had two more natural swarms come off, which I hived without any trouble, after which my bees quit swarming for the season. My bees gathered a good lot of honey and were very strong in bees, so I thought I would do a little swarming and dividing myself, and from the seven hives that I then had, I made four more.

Subscription Credits.—After sending subscriptions to this office, we would respectfully ask every one to look at the label on the wrapper of the next two papers, and there they will find the credit indicated thus: Those who have paid for the first six months of next year will find "June 83" after their names. Those who have paid for the whole year will find "Dec. 83" on their papers. The credit runs to the *end* of the month indicated. If the mark is "Dec. 82," it means that the subscription is paid until the end of the present year. Please remember that the credit given on this label is a sufficient notification of subscriptions due and receipt for payments made. If not so indicated within two weeks after sending money to us, you may be sure something is wrong, and should write to us about it. It will save annoyance and trouble if our subrcribers will give this matter due attention.

New Premiums for 1883.

As the season for reading has now arrived, we hope that each of our subscribers will endeavor to send at least one new subscriber for the Weekly BEE JOURNAL for 1883 and thus not only help on the cause of progressive bee-culture, but assist in sustaining the only Weekly bee paper in the world.

Providence has smiled on the bee-keepers during the past season, and as a general thing they are abundantly able to procure a good assortment of bee-literature.

In order to encourage every one who keeps bees, be they few or many colonies, to thoroughly read the many very interesting books on bee-culture, now published, we have determined to make liberal offers, which will be available until January 1, 1883, as follows:

To any one sending us **$8** for any books they may select from our "Book List," on the last page of this paper, we will present the Weekly BEE JOURNAL for one year.

To any one purchasing **$4** worth of books, selected from our "Book List," on the last page of this paper, we will present the Weekly BEE JOURNAL for six months or the Monthly for one year.

Any one sending us a club of **two** subscribers for 1883, for the Weekly, with **$4,** will be entitled to a copy of Bees and Honey, in cloth, postpaid.

For **three** subscribers, with **$6,** we will send Cook's Manual, in paper, Emerson's Binder for the Weekly, or Apiary Register for 50 colonies.

For **four** subscribers, with **$8,** we will send Cook's Manual in cloth, or Apiary Register for 100 colonies.

For **five** subscribers, with **$10,** we will send the Apiary Register for 200 colonies, Quinby's New Bee-Keeping, Root's A B C of Bee Culture, or an extra copy of the Weekly BEE JOURNAL for one year.

To get any of the above premiums for the Monthly BEE JOURNAL send double the number of subscribers, and the same amount of money.

☞ We will send Cook's Manual in cloth, or an Apiary Register for 100 colonies, and Weekly BEE JOURNAL for one year, for $3.00; or with King's Text-Book, in cloth, for $2.75; or with Bees and Honey, in cloth, $2.50. The Monthly BEE JOURNAL and either of the above for one dollar less.

AMONG OUR EXCHANGES.

MISCELLANEOUS.

Strained vs. Extracted Honey.—The Cincinnati *Gazette* makes the following comparative statement, showing the difference between extracted and strained honey:

Before the invention of honey extractors, the so-called Cuban honey flooded our markets. It was produced wild in the trees of the West India Islands, and with larvæ in different stages of development, and bee bread and other impurities mashed into a promiscuous mess, and thus shipped to New York and Boston. Druggists then pretended to cleanse and clarify it, but it was not always done, and besides, it was almost impossible to make it a palatable article, or fit for the use of the sick. Now a much finer article is used, even for manufacturing purposes.

Bakers, tobacconists, meat curers, druggists, compounders of liquors, and other manufacturers, use honey extensively, though they do not require for their purposes the choicest of all brands, the white clover honey, but instead the linden, buckwheat, or poplar honey.

The white clover honey is confined to table use and medical purposes. Jacob Vogel, pork packer in this city, buys a barrel of honey every other week from Mr. Muth for curing hams.

Honey Production in Pennsylvania.—The Germantown, Pa., *Telegraph* gives the following on honey-production in Pennsylvania:

Some thirty or forty years ago there was much more honey produced in eastern Pennsylvania, and especially in the counties contiguous to Philadelphia, than there is at the present time, and we may ask why less attention is bestowed upon this really important branch of farm industry now, than before. It cannot be on account of the price obtained, for that is higher now than we believe at any former period. One person, who abandoned the business, said that the bees gathered less honey than formerly, in consequence of the scarcity of clover fields and other seeding resorts of the bees; but this can hardly be, as while it is an undecided question that the cultivation of clover has fallen off, the increase of other bee pastures has clearly taken place. Take for instance the marked increase of flowers in the garden of every farmer, as well as the increase of vegetable crops, many of which put forth immense quantities of blooms. There are many of the cultivated trees also that flower enormously, and far more than make up for all the other losses combined. We rather think that the extra care that bee culture requires, over any other business, to produce the same amount of income, is the cause of its decline. The honey culture, in fact, is a science, and should inspire in those who pursue it, a love for it outside of the profit account, and in this case, the enjoyment which it imparts, must be considered as a part, and a very desirable part, of the returns.

The improved hives, which have taken the place of the old, cumbrous ones, that were so awkward in handling and failed to yield an equal supply of honey, when compared to these remodeled ones, make the care of bee-keeping much easier and pleasanter. The small sections of honey make the article much more salable than formerly, though they require careful handling. Altogether, with due care and a proper management of this beautiful and interesting branch of domestic industry, the apiary should be found upon a dozen farms, where it is now found only upon one.

Systematic Labor will Win.—The Valparaiso, Ind., *Vidette*, of Oct. 26, 1882, contains the following notice of a visit of its correspondent to the apiary of Mr. T. S. Bull:

Those who pay the closest attention to their home interests, meet with surest success. System and sufficient labor causes the poorest land in our county to produce and amply repay all pains. It was our pleasant opportunity to call on an old resident, Mr. Theodore S. Bull, not long since. Mr. Bull showed us through his cellars, which are arranged in separate apartments; one expressly for bees, accommodating nearly 200 colonies, in such manner that any temperature can be maintained. The next is a very large room arranged for milk and butter, with a refrigerating cupboard where all kinds of eatables can be kept in perfect condition. Such a room as this is much to the convenience of a house wife, and the comfort of a family. The next room was arranged for vegetables, easy of access and well ventilated. These cellars are probably the best in the country.

We were next conducted through the bee house—consisting of two apartments—a work room and a store room. Mr. Bull manufactures his hives, boxes for honey, racks, and everything needed in this line; also comb foundation to use in hives and boxes, thereby saving much time and labor for his bees. His honey extractor is a modern invention, so that his bees can fill the same comb several times. He then invited us, if we were not afraid, into his apiary, which was really a sight, consisting of about one hundred and eighty colonies, which were the largest and strongest we ever saw. He quietly gave each a few puffs or smoke, and then showed us the different queens and explained their habits, handling them as if they were flies.

☞ Articles for publication must be written on a separate piece of paper from items of business.

For the American Bee Journal.

How and Why I Clip Queen's Wings.

G. M. DOOLITTLE.

While writing my series of articles, I mentioned having my queens' wings clipped, in connection with natural swarming. At that time, I was requested by several to tell how I clipped the queens' wings, and why I did so, which I will now try to do.

The first thing to be done is to find the queen. This is quite easily accomplished at any time during the first rush for pollen or early honey in the spring, for, at this time, the major part of the bees are old, or field bees. Hence, during the middle of fine days but few bees are at home to hinder our seeing the queen; the rest being busy bringing in the first forage. I take advantage of this fact, and make sure that all queens are clipped, the knowledge of which makes me feel sure that no swarm can steal a march on me and get to the woods.

Before starting for the apiary, we want a pocket knife, the blade of which should be as sharp as possible; then we are ready for finding the queen. Having found her, I hold the frame in my right hand, and with the thumb and fore finger of my left hand, carefully lift her from the comb, by taking hold of her wings. Now put down the frame and hold the queen within two inches of the tops of the frames in the hive. Take the knife and carefully draw it across the wings till the queen drops, and the work is done.

There is no danger of cutting yourself, for the knife will not cut your finger till the queen's wings are off, and as soon as she drops you will stop cutting, of course. I generally cut all the wings I get between my thumb and finger, if it takes *all* the wings, for the reason that a queen without wings is much more easily found. If she can't fly with a part of one wing off she may as well have all off, for wings were created for the purpose of flying.

Now I come to why I clip them. The third year I kept bees, about two o'clock in the afternoon, a large nice swarm came out which was hived. At four o'clock they were busily at work and continued thus the remainder of the day. The next morning I was called from home till nine o'clock, and upon going to the apiary to look for father's swarms, I saw that scarcely a bee was to be seen about this new hive. I at once opened it and found it deserted, except a few bees which had returned from the field after the swarm had left. During the night several pieces of comb had been built and the queen had laid a few eggs therein. I was very much disappointed and vexed at the loss of my swarm, and vowed then and there that this one should be the last which should leave in that way, which has proved true. I at once clipped all my queens' wings, and soon found that I had not only made sure that no bees could go to the woods, but I also had made a saving as regards the trouble of hiving swarms; for before, I often had to climb tall trees to get swarms, or what was still worse, bother half an hour or more, trying to get a swarm out of the forks of a tree or off the body of the same.

Now, all I had to do when a swarm issued, was to go, with a wire cloth queen cage in my hand, to the front of the hive casting a swarm, and when the queen came out let her run into the cage, into which she was fastened. Then the hive was moved to a new location, and a new hive, all ready for the bees, was put in place of the old one. Missing the queen, the bees would soon return, when the queen was liberated and all entered the hive or hived themselves, as it were. No climbing of trees, cutting off limbs, or lugging a cumbersome swarming box about, was necessary. If, for any reason, I wished to have the swarm stay out awhile, I would hang the cage containing the queen, with the alighting swarm, and thus hold them until I was ready for them. If I did not wish to cut off the limb when I was ready to hive them, the changing of hives was done as before, the queen taken from the cluster, and soon the bees would return.

Again, when two or more swarms came out together, by having the queens back in cages, they could be made to go back to the place they came from, by a little trouble being taken to spread a sheet over the hive likely to receive the most bees. As the hives were changed while they were out, each swarm was secured where I wished them.

In one case I had as high as eight or ten swarms out all together, and one of the queens was placed with them till I could get the eight hives changed; when I shook all into a large basket and put them into the different hives till I had an equal amount of bees in each hive.

In all cases I have observed, a part of the bees, upon returning, will find the queen and cluster upon her, if no one is present to cage her when the swarm issues; so there is little danger of losing a queen. If I am called away from home during swarming time, and if Mrs. D. is absent also; when I return I go through the yard, looking about, and, if any colony has swarmed, I readily find this little cluster of bees with the queen. Now, to find where she belongs and which one has swarmed, take the queen, after caging her, and put her where the bees cannot find her, when they will soon return to the hive from which they issued, thus showing where the queen belongs.

Much has been said about the fountain pump to keep bees from decamping. The reader will readily see that the clipping of queens' wings does away with that expense. If you wish to use a fountain pump for other purposes, it might pay for such, but the clipping of queens' wings is a more effectual preventive to keep the bees from going to the woods. Other reasons might be given why I clip the queens' wings, but the above are the most of them. I will say that I would as soon think of going back to black bees and box hives as I would of leaving the wings of my queens so that they could fly.

Borodino, N. Y.

For the American Bee Journal.

How I Winter My Bees.

IRA BARBER.

As the time is now at hand for getting our bees into safe quarters for winter, and as the plan that I have practiced for the last twenty years has not failed to bring them through safely, and nearly as strong as when they were put into winter quarters, unless they starved, I give it for the benefit of those that have failed to winter their bees successfully.

Any warm cellar, under a dwelling house, occupied by a family, no matter how damp, if the water does not reach the bees, I consider a safe place for them; while a cellar that freezes and thaws, at every change in winter, I should consider a very unsafe place to risk them. I have wintered bees in wet cellars (so wet that water stood all over the cellar bottom, all the winter), and have had them come out in fine condition, after remaining there from the middle of November until May 10. Bees will winter in a warmer atmosphere than many suppose, as they will stand more heat than cold, where the atmosphere is kept pure.

Where small lots are kept, there is no necessity of ventilating a cellar, but when a cellar is to be filled with bees it is necessary to ventilate from the top of the room. I use a three-inch tin pipe, 24 feet long, with an elbow at the bottom, long enough to reach through the wall. This pipe goes up on the outside of the building and enters the cellar near the top of the room, where the bees are kept. I have no draft of fresh air coming into the room from any quarter, and have found that if I wish the bees to keep quiet I must keep fresh air away from them.

I carry my bees into the cellar about the middle of November. My hive is the Quinby eight-frame hive. I do not use any division boards, neither do I punch holes in the combs to make passage for the bees, but all are put in, just as they were when the honey was taken off, with a cloth on the top of the frames, all covered with bee glue, and a board on the top of that. I use no plank or benches to put them on in the cellar, but pile up in columns, four deep; the first, or bottom tier is placed on caps from the hives, ten inches high, this brings the bottom tier about one foot from the cellar bottom, and every colony on the bottom tier are raised up from the bottom board one-half inch, while all the rest are left just as they were when in the yard; entrance all open and top of hive tight as glue, cloth, top board and the weight of the pile will make them.

When all are packed in this way, I close and bank up the cellar, including the windows, and let them entirely alone, until it is time to put them out, which, as a rule, is the latter part of April or first of May. The hives are placed close together; no spaces or alleys left. Many will want to know how bees appear in a close, warm cellar. I will say that the atmosphere is warm, and that the bees are comfortable, outside of the hive as in it, and do not cluster, but stand on the combs just as they will in summer. I have left them there in November, when the bees were standing out on the ends of every hive, that I could see, and found them just so when I went there in April. I found no dead bees on the bottom boards, and the loss last winter was less than three bushels from 193 colonies, in one cellar; and 1½ bushels in the other cellar, where 130 were kept, but as a rule I find about 3 bushels to 100 colonies. I find the hives bright and clean when the cellar is first opened, showing plainly that if there is any discharge from the bees, it is in a dry state, for they cannot get the dysentery in as warm a room as the one in which mine are wintered. When they are carried out in the spring, their bodies are not distended, but look as they did all through May and June of the past season, in this section.

To those that question this plan of wintering on so high a pressure as I have described, I will say that I will show bees that I bought of M. Quinby, in 1863, or rather the hives and combs that have stood 19 winters and are good for many more, if wintered as I have described.

Bees wintered thus will come through in as good condition as they were in the fall; and if not put out until there is something for them to do, they will not dwindle, but be ready for swarming in about forty days after leaving the cellar, as a rule.

I would not attempt to winter bees in a very dry cellar, as warm as I have described, for they require more moisture than could be found in so warm a room. Had I an exceedingly dry cellar, and was obliged to use it, I should thoroughly drench the bottom with water before using it. I once used a dry cellar in which to winter my bees, and found it the worst cellar that I ever tried. Bees were not quiet for a single day while in it. I have thought that a solid cold winter was best for bees, on the plan that I have described, but as last winter was the warmest that I ever knew, and that the bees came through in fine condition, I can now say that either hot or cold, the warm damp cellar does not fail to bring them through in good condition.

Where bees require feeding I use coffee A sugar, and feed enough in one night. I give the feed hot, and use common tin pans for feeders, and if one does not hold enough, give them two at the same time. I put the pans on the ground, near the hive to be fed, fill it with hot syrup, break up some old comb for floats, to keep the bees out of the liquid, then put the colony over the pan, wrap them up at the bottom to keep out the cold air, and find in the morning that all the feed is up in the hive; the hive should then be put back on the stand, and all pans taken away. I feed as late in the season as I can; then I know what they have. It is not necessary to have the feed sealed, when wintered in my warm cellar. When a hive is but one-third, or half filled with combs, I prefer to lay combs of honey on top of the frames, well wrapped in cloth, and the cap of the hive over all; this I prefer to any other plan of feeding.

DeKalb Junction, N. Y., Oct 24, '82.

Kansas Bee-Keeper.

Bee-Keepers' Visits to One Another.

J. E. POND.

If our brother bee-keepers would often make interchanges of visits with each other, much benefit, as well as pleasure, would be derived therefrom. While we gain much by reading accounts of experience, far more could be gained by seeing the results in person, and a personal conversation will often cause truth to rise and error to disperse, when a discussion carried on in print might only serve to more firmly fasten the different views of the matter under consideration in the minds of those conducting the discussion.

Acting on the above idea, I lately stole a day from my business and made a trip to the beautiful town of Wenham, in this State, where is located the apiary of Henry Alley, the largest queen breeder in New England and one of the largest in the whole country. I luckily found friend Alley at home, and he, although quite busy, devoted a half day to showing me his apiary and making the visit a pleasant one to me. At present he is breeding Italian, Cyprian and Holy Land queens, having dropped the Egyptian and Hungarian. He has his queen cells built in full colonies in his home apiary, but has the different races fertilized in different yards, located about three miles apart. As no bees other than his own are kept in town, he has no trouble with impure fertilization, but is enabled to warrant every queen he sends out. He has been engaged in breeding queens since the first introduction of the Italian, some twenty years ago, and as he has made that business a specialty, and his experience has enabled him to arrive at results far in advance of the ordinary queen breeder.

By the aid of much study, and by experiment largely, he has at last discovered a plan by which he accomplishes what a short time ago would have been considered almost a miracle. I opened hive after hive devoted to building queen cells, and found such cells, built in straight rows, each cell spaced as evenly apart as the teeth of a coarse comb, and not a single cell among the four or five hundred, that I saw, but could be transferred from the comb without injury to its neighbor. Each cell pointing downwards in the position naturally given it by the bees, and this without the use of any sticks or slats. I was much surprised at what I saw, for it far excels anything which I had ever seen or heard of, and after much persuasion I induced Mr. Alley to inform me how it was done, and after receiving the desired information, I was more surprised in thinking that no one had hit upon the idea before, so simple is it, and so little labor to be done in operating it.

By his plan he has all cells built in full colonies, which are never queenless, and consequently never without brood. The cells are built in exactly that position in the hive which the owner desires, with their points downward, and so regularly spaced that not a cell need be destroyed. As his plan gives plenty of room there is no crowding, and every queen reared is large and full size. Everything is laid out to a certainty by the owner, and nothing is left to the whims or vagaries of the bees. They must build the cells in just the position desired, and the only chance there is to have an imperfect cell, is an egg being carried out from the cell given them, to some other cell, a thing which, in practice, by this plan, Mr. Alley has never seen done. Were I to take up the business of breeding queens I would adopt this plan and use no other, for it combines simplicity, economy and certainty to a remarkable degree.

Foxboro, Mass.

For the American Bee Journal.

Comments on the Chicago Convention.

MOUCH AMIEL.

I have read in the BEE JOURNAL with more than usual interest, the proceedings of the Northwestern Convention, held at Chicago, Oct. 18. The discussions are valuable when reported by an experienced bee-keeper, but are usually of very little value when reported by ordinary newspaper or periodical reporters; so that, as a rule, I much prefer the reading of essays. All cannot attend the conventions, or all of them; and but few men, in the haste of description, can communicate their knowledge as lucidly as they would in an essay.

Mr. Bussey asked, "What is the best fuel for smokers?" Why not roll blotting paper, and, if it is burned too fast, roll it very fine, and also alternate with the sheets, common straw paper, or, what may be better, procure pulp from paper mills, mold it into rolls, pressing it very firm.

Mr. Valentine said that in feeding winter stores, he mixes two measures of sugar and one of water. I tried it, (crushed sugar,) and in twenty-four hours one half was granulated. Acid may prevent it, but I think not. I tried strong vinegar, and the vial with acid in it, had mold on it in three months; the other had not, but both had a few perfect chrystals, ⅛ inches square, at the bottom. I am of opinion that the proportions given by Mr. Oatman would be rather thin, if fed late.

Permit me to ask those that have fed bees mostly, or entirely with sugar syrup (fed in season for the bees to

cap it over), if they ever had such a colony, so fed, have the dysentery? We do not seem to differ at all as to the conditions necessary to successful wintering (if there was no dysentery), to wit: Cellar, cave, clamp, spare room, hay-packing or chaff, if the thermometer is kept between 30° and 45°; dark, pure air, dry room, and if you can, upward ventilation, or, more correctly called, upward absorbents, little or no current, plenty of bees and *healthy food*. By complying with these conditions we have made, either naturally or artificially, what is equivalent to a very mild winter, but with all the most favorable conditions.

Some seasons bees are attacked with disease, and my experience is that one flight a week, say during a fine January thaw, will but little improve a colony that is much diseased. Many of us know that with, to all human appearance, identically the same conditions, each season, during some winters they have the disease, and in the succeeding and preceding ones they have been perfectly healthy. How, or why is this? Do not all rise, at once, to tell me that the winter was very cold. You forget that you had them housed and cared for exactly the same as in many preceding winters; the same room, the same temperature, the same everything, so far as you can by any possibility see. I repeat, what is the cause of this difference in their health? Is it in the honey they have stored? the pollen, or possibly, the condition of the atmosphere? We may, and often do find but a portion, say one or two, affected, the remainder perfectly healthy! How, or why is this? We all know that the honey gathered by one colony, or a portion of it, is quite different from the remainder, or other colonies in the same yard. All these are questions to be thought of. We may never agree as to the cause of the disease, but, as in the case of foul brood, or many diseases of the human family, we may find a remedy, without being able to trace it to the cause. I fully believe and hope such will be the result of well and thoroughly conducted experiments, and am fully convinced that the remedy will be found in sugar syrup.

St. Paul, Minn., Nov. 1, 1882.

For the American Bee Journal.

Wintering Problem Solved by Lime.

F. DELLA TORRE.

Without being egotistical, I am not afraid to state that the proper use of quick lime in a hive, solves the wintering problem. Pure dry air, and stores enough, is all that a good colony of bees require to winter successfully. It is impossible to have dry air in a hive in damp weather, without using *chemical* absorbents; mere chemical absorbents, such as chaff, sawdust, corn cobs, and the like, only retain moisture. When the atmosphere outside is damp, that in the hive is more so, for it has the large amount additional, from the breath of the bees, added to it. Dry cold has never killed a colony of bees for me yet; even when most of the stores were cider.

I have tried many, and costly experiments, carried on uninterruptedly through winter and summer, in my endeavors to solve this wintering problem, and until some bees are produced that can winter like wasps, or some methods, that we don't dream of now, are discovered, for protecting bees in winter with absolute certainty, I repeat that I have, in the lime protection idea, all that I desire.

Some of my friends tried the lime last winter, and their letters are enough to turn bee-keepers towards my way of thinking on this subject.

Reisterstown, Md.

Translated from Deutscher Bienenfreund, by A. R. Kohnke.

Sowing Honey Plant Seeds.

FR. HUCK.

We meet with first-class honey plants among the annuals and biennials, as well as among the perennials and plants of woody structure. Many are natives of a warmer climate than our own, but have become acclimated, so much so, that we are not aware that they are from a foreign and warmer country. The importation and culture of them in this country has been altogether a different object from providing for bee-feed, and we may assume the existence of numerous excellent bee plants, which will become known only as planting for bees especially is practiced. But even our native *flora* contains many plants which furnish honey in large quantities and very fine quality, and to improve bee pasturage we should notice these as well as those of foreign origin.

In regard to annuals they have this advantage, that they furnish ready means to improve the bee pasture the first year they are sown, and are easily cultivated. Besides that, they may be sown at such time as to come into bloom when natural sources fail, thus filling gaps in the honey season. Such annuals have to be sown generally every year, though some of them will perpetuate themselves by the dropping of their ripe seed.

The number of biennials is rather small; most generally known is *Echium vulgare*, as also rape and some varieties of clover, because they are cultivated as biennials; although, strictly considered, they are not such.

More numerous are the perennials, shrubs and trees, furnishing honey for the bees; many of them being ornamental, on which account they should largely be cultivated in gardens, parks and cemeteries. Many of them get to be very old, and may occupy the same space for scores of years. To further this dissemination they should be presented to all who would give them a place, in their garden or premises. We also find that many of them may be used for other purposes, especially kitchen vegetables and plants possessing medicinal properties, so that we may derive some profit from them aside from the honey they furnish.

The most important for the bee-keeper are those plants which are of a woody structure. Once planted, they will last a generation or more. True, they do not furnish honey the first few years after being planted, like the annuals and perennials of an herbaceous character, but when once planted, will cause little or no further trouble and work.

One of the most desirable for our country is the lapwood or linden, and should be planted most extensively. To prolong the honey yield of this tree it should be planted in different situations, such as the south and north side of hills, in valleys and on top of hills; besides that, there are different varieties of this tree, some of which come to bloom earlier in the season and some later. A close observer will very often meet with specimens of such different kinds.

Through earnest work we will learn and enlarge our views. Nature is inexhaustible, and provides for the need of mankind. Nowhere is this more noticeable than in the world of plants. As soon as it becomes desirable to have a certain vegetable possess especial properties, as for instance, with respect to earliness or size, it is soon obtained. The rose, for instance, usually blooms in May and part of June, and but once a year, but now we have varieties which bloom a second time, in autumn; and some even all summer. Some varieties of our common acacias bloom all summer. It can, therefore, not be considered as an impossibility to obtain from our red clover a variety, by selection of seed of course, which would permit the bee to empty its florets of their sweet contents, which, at present, is well nigh impossible, on account of their length. The industrious and progressive should try everything.

[It seems to me more rational to adapt the plant to the animal than the animal to the plant, as to change the size of a plant is more easily accomplished, than to change the size of an animal, or any part of it. If we decrease the size of the clover heads, we may look for an increase in the number of them from each root, which would be a double gain; but if we increase the length of the bee's tongue, we may decrease the size of some other essential part, which would be a disadvantage.—KOHNKE.]

Experience and science in bee-keeping make commendable progress. Noble and high-minded men devote their time and energies to it, hence all who take an interest in progressive bee-keeping, should lend a helping hand, by the dissemination and cultivation of honey plants. Look how many honey plants your surrounding country contains, and how many it might hold in place of obnoxious weeds in fence corners and waste places, and then go to work and try to change such an aspect for the better. Those who wish to cultivate honey plants should begin at first on a small scale to learn their cultivation, and discover what kinds do best in the soil and situation at his disposal.

And now, brother bee-keeper, when you have read these few lines, plant a

basswood tree; plant it this year. Awaken the interest of your children and neighbors in this good work. Having thus been industrious, your conscience will tell you at your parting hour from this world that your works and deeds are sweeter than honey.

Besides *Tilia*, there are other trees and shrubs, furnishing an abundance of honey. Chief among many may be mentioned *Asclepias syriaca*. I have seen this plant covering the side of a hill, having been there fifty years or more. Its flesh-red blossoms are eagerly visited by bees in summer and fall; the honey is said to be of excellent quality.

Another plant, furnishing a large quantity of honey, is *Borogo officinalis* (borage). Being an annual herb, it must be sown every year and may be made to bloom any time in the summer or fall, by sowing in proper time.

Nepeta batavia (catnip) should also be encouraged to grow wherever possible; it is perennial, sometimes biennial.

Especially recommendable is, *Hysoppus officinalis* (hyssop). This herb blooms in the latter part of summer when there is not much else for bees to be had. It will grow anywhere and sow itself afterwards. This plant should receive special attention, as it furnishes more honey than any other plant occupying the same ground surface.

Well worthy of consideration also, is *Hedgsarum cibrichis* (esparsette), fennel, rape, caraway. The first furnishes as well good feed for cattle, whilst the seed of the three last mentioned generally bring a good price in market.

[Planting for honey is the key note to success; and we are glad to note the fact that not only are the best and most progressive bee-keepers in America now convinced of this fact, but also those of Europe and Australia.—ED.]

For the American Bee Journal.

Effect of Dampness on Bees in Winter.

S. CORNEIL.

In looking over the back volumes of the BEE JOURNAL I find that writers on wintering always give the temperature at which the repositories for bees should be kept, but they never seem to think of giving the proper degree of humidity of the atmosphere, although the latter is the more important of the two. The writers generally seem to be agreed that bees when clustered can endure severe cold, but cannot stand dampness, yet it seems not to have occurred to any one to test the degree of dampness at which they will remain healthy, and beyond which they will become diseased. The natural laws relating to the production of moisture by the consumption of food, the evaporation of moisture and the humidity of the air have been pretty well investigated and ascertained, and we only need to comprehend and apply them to attain our object. With a view to place before your readers the ideas of some of the leading scientific lecturers and writers on those subjects I will quote some of them.

Mr. Frank Cheshire, in the AMERICAN BEE JOURNAL for 1879, page 277, says: "Honey is a hydro-carbon, consisting almost entirely of saccharine matter, and like common sugar does not undergo digestion, but simply transudes through the delicate tissues into the circulation, being utilized for giving heat and force. So used, it is converted into water on the one hand, and carbonic acid on the other. These escape through the lungs, no residue remaining to be carried off in the excreta. When bees take honey it is gradually absorbed into the fluids, and passes off from the organism of the bee through the breathing apparatus."

It has been ascertained that about 70 per cent. of the honey consumed is transformed into water, and will pass off through the trachæ as vapor, if the surrounding air be dry enough to absorb it.

Mr. L. C. Root, on page 218 of the same volume of the BEE JOURNAL, says: "Some of Mr. Quinby's last experiments led him to believe that the liquid portion of the feces was evaporated through the body of the bee, when surrounded by proper conditions."

In Carpenter's Principles of Comparative Physiology, on page 356 and 358, we find these statements: "There is no reason to believe that the pulmonary exhalation is liberated in any other way than by *evaporation*, under the peculiarly favorable circumstances afforded by the delicacy and permeability of the respiratory membrane. .....

"In insects, it has been ascertained by Newport, that transpiration of fluid takes place to a considerable extent; it is, of course, difficult to ascertain what proportion of the loss of fluid takes place from the external surface, and from the prolongation of it that lines the air passages, which in this class are so extensive and minutely ramified; probably it is from the respiratory membrane that the principal liberation of it occurs.....

"If, however, the external air be saturated with moisture, and be of the same temperature with the body (so as to be unable to acquire *its* heat any increase of capacity for vapor), it is obvious that the evaporation from the lungs, as well as that from the skin, will be entirely checked."

From the principles here laid down, it is plain that if the air breathed by the bees be overloaded with moisture, the large amount of water generated by the consumption of honey will not be exhaled by evaporation from the respiratory membrane, but will remain in the bodies of the bees, and, if this condition of the air be long continued, it is at least sufficient cause for the bees becoming sick, and, I think, the most probable cause of abdominal distension and dysentery.

It will, perhaps, surprise some to learn that the natural dampness of the atmosphere is much greater during the coldest weather than it is during the months when the bees are most active. The results of observations, at the observatory at Toronto, show that for a period of thirty years, from 1841 to 1871, the monthly means of relative humidity were as follows: Of course, 0, representing dry air and 100 the point of saturation. January 83°, February 81°, March 78°, April 72°, May 71°, June 74°, July 73°, August 76°, September 76°, October 79°, November 81°, December 81°. Average for the year 77°. Taking the months of November, December, January, February and March, during which bees are confined to their hives, the average is about 81°; while for the remaining seven months, when they can fly, the average is a little over 74°, a difference of more than six degrees of dampness when the bees are least able to resist its effects.

The report also shows that the humidity of different winters varies as much as does their temperature, and it often occurs that excessively cold winters are also excessively humid, and on turning to the reports of bee-keepers, I find those are the winters in which the heaviest losses have occurred. On the other hand, it is found that when the humidity has been about normal the bees have wintered well. For instance, in the winter 1874-5, the temperature for December was 1° colder than the average for that month; January 6.89°, February 12.74°, and March 5.20°. The humidity for January was 84°, for February 86°, and for March 81°. Prof. Cook, in his prize essay, refers to it as "That terrible winter of 1874-5, terrible alike for its cold and bee-mortality." He might have appropriately added "and remarkable for its humidity."

Again, in the winter of 1880-1, December was 4.30° colder than the average for that month, January 6.35°, February 2.87°. The mean relative humidity for each of these months was 85°. The heavy losses sustained by bee-keepers during that season were too serious to be readily forgotten.

On the other hand, in the winter of 1877-8, the temperature for December was 8.68° above the average for that month, January 1.60°, February 1.60°, March 8.18°. The humidity for December was 81°, January 84°, February 81°, March 79°; on the whole, being about normal and in no case varying more than a degree from the average for each particular month. So far as I can learn from the reports of bee-keepers for that season, the bees wintered well.

The humidity as well as the temperature of different localities in the same latitude varies considerably. In selecting a location, and in preparing bees for winter, it is of importance to know exactly how those matters stand. We are told that in the old country they have meteorological societies whose special object is to ascertain the degree of heat, cold, and moisture in various localities and the usual periods of their occurrence, together with their effects on the health of the

people and upon the different agricultural productions. Our bee-keepers' associations might add to their usefulness if the members were to resolve themselves into such societies, reporting the conditions of the climate and its effect on the bees, to the bee journals, for publication.

The American continent is now pretty well dotted over with observatory stations from which reports might be obtained. To collect and tabulate the results as regards temperature and humidity, would involve a good deal of labor, but it would be a valuable addition to the knowledge at present, available to those making a specialty of bee-culture.

But it may be asked what good, if we did know all about the humidity, since it is a matter beyond our control and since we are obliged to take the climate as we find it. As far as out-door wintering is concerned, this is partly true. All we can do is to give the best possible ventilation, while we, at the same time, confine the heat. A damp atmosphere will absorb some moisture, provided it be frequently changed.

The reports of Dr. Tinker, Jerome Wiltz, and Thaddeus Smith go to show that the hives having the best ventilation came through best in 1880-1. But in good cellars having a constant upcast of air, connected with a chimney, and a steady supply of fresh air through a six-inch glazed pipe, running under ground, say 200 ft., and buried below the reach of frost, experience has shown that bees winter well.

The temperature is generally nearly right, or can be controlled, but the most important element in the success of such wintering repositories seems to have been overlooked, and that is that the air in such cellars is much drier than the external atmosphere, even though water be standing on the cellar bottom.

Speaking of pulmonary evaporation, Dr. Carpenter says: "Wholly to suppress it, the air must not only be of extreme humidity, but must also have a temperature not inferior to that of the animal, since, if the air be colder it will be warmed by contact with the body, and thus be capable of holding an additional quantity of aqueous vapor in solution."

On the same principle the cold air, in its passage through the pipe, will be warmed, and thus become a better absorbent of moisture when it reaches the cellar. For instance, if the temperature of the external air be 15°, in its passage through the pipe, it will be warmed to, say 42°. It should then be just twice as dry as the external atmosphere, because for every addition of 27° to the atmosphere its capacity for moisture is doubled. Last winter a six-inch wooden pipe running 140 feet under ground, brought the air to my cellar at an average of about 40°. On the 24th of January last, at 7 a. m., the temperature outside was 36° below zero. A thermometer in the mouth of the pipe in the cellar stood at 35° above zero; that is, the air in passing through 140 feet of pipe acquired 71° of heat. The humidity must have been many times less, but I had no means of testing it. The success of this method depends a great deal on having the air carried up from the cellar with sufficient rapidity and constancy, and for this purpose the ordinary wood-burning stove is hardly sufficient. It will pay well to take pains to have the exhaust pipe working steadily and vigorously.

Thus, for wintering our bees, we can create an artificial climate, or about the right temperature and humidity, and we can have them surrounded by air just as pure as it is out-doors.

If, in such a cellar, the hives have thick quilts of wool over the clustering space, and the combs raised two or three inches above the bottom board and this space open on at least one side, so as to give full play to the principle of the mutual diffusion of gases, there will certainly be no wet or moldy comb; and if the food is good I think there will be no abdominal distension or dysentery, even if the combs do contain pollen; and experience affords grounds for saying that in the spring the bees will not dwindle any more than bees wintered most successfully on their summer stands.

In making reports as to how bees have wintered, it is desirable that, where accuracy is possible, all the conditions should be accurately given, and as the time to begin taking notes is drawing near, I would suggest the propriety of using a wet bulb hygrometer for determining the humidity. The expense is only trifling, probably less than ten dollars. Any one who understands long division can make the calculations.

Lindsay, Ont., Oct. 17, 1882.

Local Convention Directory.

1882.	*Time and Place of Meeting.*
Nov. 29-30,	Western Michigan, at Grand, Rapids. Wm. M. S. Dodge, Sec.
1883.	
Jan. 10.—	Eastern N. Y., at Albany, N. Y. E. Quakenbush, Sec., Barnerville, N. Y.
11,	Nebraska State, at Wahoo, Neb. Geo. M. Hawley, Sec.
16-18,	Northeastern, at Syracuse, N. Y. G. W. House, Fayetteville, N. Y.
19, 20.—	Mahoning Valley, at Berlin Centre, O. L. Carson, Pres.
Feb. 3.—	Northern Ohio, at Norwalk, O.
April 5.—	Utah, at Salt Lake City. E. Stevenson, Sec.
Oct. 17, 18.—	Northwestern, at Chicago, Ill. Thomas G. Newman, Sec.

☞ In order to have this table complete, Secretaries are requested to forward full particulars of time and place of future meetings.—ED.

☞ The Western Michigan Bee-Keepers' Association will meet at Supervisors' Hall, in the city of Grand Rapids, on Wednesday and Thursday, Nov. 29th and 30th, 1882. The co-operation of all bee-keepers of this section is desired.

WM. M. S. DODGE, *Sec.*

Haldimand, Ontario, Convention.

A meeting of the Haldimand Bee-Keepers' Association was held at Cayuga, Ontario, Canada, on Friday, Oct. 27. at 1 o'clock p. m., the President, E. DeCew, Esq., in the chair. The President explained the object of the meeting, viz: The adoption of a constitution for the association, and election of additional officers.

The constitution was adopted, fixing an annual fee of 50c. for membership.

Present—E. DeCew, President; E. C. Campbell, Secretary; Robt. Buckley, Robt. Anguish, David Anguish, Ambrose Gloyd, James Gloyd, Wm. Harrison, Fred. Mehlenbacheler, Andrew Vanderburgh, B. Byers, Wm. Jack, etc.

The construction of the best kind of hives was discussed by Messrs. DeCew, Vanderburgh, Gloyd, Byers and Buckley, but no result arrived at.

The wintering of bees was discussed by Messrs. DeCew, Gloyd, Vanderburgh, and Buckley, the main essentials being plenty of young bees and stores, and proper protection in winter.

The question of swarming was discussed; the general opinion being in favor of dividing.

The following additional officers were elected for the following townships: Walpole, Wm. Harrison; Seneca, Lawrence Welch; Dunn, Abraham Albright; South Cayuga, Andrew Vasbinder; Rainham, James Gloyd; North Cayuga, Robt. Coverdale; Dunville, Dr. McCallum; Seneca, James T. Nelles.

On motion it was *Resolved*, that the next meeting will be held at Nelles' Corners on the last Friday in March, at 11 o'clock a. m.

A committee, consisting of the President, Secretary, and Mr. Wm. Jack, was appointed to prepare a list of subjects for discussion at the next meeting. E. DECEW, *President.*

E. C. CAMPBELL, *Secretary.*

☞ The annual meeting of the Mahoning Valley Bee-keepers' Association will be held at Berlin Center, Mahoning Co., O., in the town hall on Friday and Saturday the 19th and 20th of January, 1883. All bee-keepers are invited to attend and send essays, papers, implements, or any thing of interest to the fraternity. A full attendance is requested of all who are interested. In fact, the meetings will be so interesting that you cannot afford to miss them. We expect a lecturer from abroad on the evening of the 19th.

LEONIDAS CARSON, *Pres.*

☞ The Nebraska State Bee-Keepers' Association, will hold its annual session in Wahoo, Saunders county, Neb., commencing Thursday, Jan. 11th, 1883. Arrangements have been made with the railroads to secure 1¼ fare for the round trip. The Saunders county Bee-Keepers' Association will furnish entertainment free to all visiting apiarists. Bee-keepers from neighboring States will be weleomed.

T. L. VONDORN, *Pres.*

GEO. M. HAWLEY, *Sec.*

For the American Bee Journal.

Texas Bee-Keepers' Convention.

The Texas Bee-Keepers' Association held its fourth annual convention at the apiary of Judge W. H. Andrews, at McKinney, Collins county, Texas, April 25-26, 1882.

The Convention met at 9 a. m., under the shade of some fine, ever-bearing mulberry trees, one of which measured twenty-eight inches in circumference, heavily laden with ripe, luscious fruit, as well as berries just beginning to form. The situation was in full view of the Judge's apiary of 300 colonies, of the brightest Italians. On the other hand was a grove of trees, planted by Judge A. many years ago, among which were the poplar, chestnut, sugar maple, and several other fine specimens of deciduous trees, also a choice selection of evergreens.

Thus pleasantly situated, the Convention was called to order by the President, Judge Andrews, who introduced W. K. Marshall, D. D., of Marshall, Harrison county, Texas, as the oldest scientific bee-keeper in the State, and tendered him the chair to preside over the meeting of the convention.

Dr. Marshall delivered an able address on practical bee culture.

He said that many persons would undertake bee culture but for fear of the bee-moth destroying their bees; that anyone who would allow the moth larva to commit destructive depredations, ought to have no bees. He felt friendly toward all bee publications and those engaged in the pursuit, but said that the bee literature of the majority of journals was not adapted to bee culture in the South, the subject of wintering and bee cholera or dysentery consumed nearly one-half of the space; and he thought he spoke the experience of a majority of the scientific bee-keepers in the South when he said that he did not read one-half of the articles on wintering. He had grown tired of so much of it, it did not interest the Southern bee-men.

He had a few cases of dysentery caused by bad feed, several years ago. He had had no experience with foul brood. The only place where it existed in the State was Dallas county. He was often asked if bee-keeping was a success in Texas,—will it pay a reasonable compensation according to capital invested, as compared with other profitable pursuits? His experience was, that a greater income could be realized from the skillful management of the honey bee than from any other pursuit, capital and labor considered.

He advised all to be up with the times, take the best bee periodicals, get the best books, read the best bee literature.

He said that practical bee culture resolved itself into three important factors: Locality, race of bees, and marketing the products of the apiary.

We have good and bad localities. To secure a good locality, we must have an understanding of the honey-producing plants, what produces honey, and at what season? Among the leading honey plants he mentioned were the red bud (Judas tree), the willow, fruit trees, black locust, honey locust, ratan vine, corn and cotton; he was convinced that a large portion of his honey was from cotton. He gave some very valuable statistics of the honey crop for the past thirty years. In 1860, he said that the honey yield was enormous, almost incredible. The yield was mostly from honey dew, which exuded from the leaves. He saw 400 lbs. of honey taken from one tree at one time. He had never before, nor since, seen such a season. He spoke of Red River and Sulphur bottoms as being excellent localities for apiaries.

He spoke at length of the improved races of bees, and stated that by careful breeding they could be brought to a higher standard, and he regarded the home-bred queen as superior and discouraged the further importation of new races other than the Italians, and even some of these were not well marked. He regarded the pure Italians as superior to any other race. Their docility and capacity for storing honey were objects of much respect.

He gave an interesting account of his experience with the Cyprian bees. They were very prolific, and good honey gatherers, but consumed the most of their stores in brood-rearing. They must be made queenless in order to obtain surplus. They would become infested with laying workers in three days after the removal of the queen—were swift flyers and *stingers*.

To beginners, he would advise the buying of good colonies to commence with, and consider what kind of honey to produce, and to produce that kind, comb or extracted, which would find a ready home market.

He considered the 8-frame Langstroth hive the best size for surplus. In marketing honey, his own experience was in favor of extracted honey; comb honey would not bear shipping. Extracted honey was more wholesome to the consumer and more economical to the producer. He considered some bees lazy, while others were industrious; had tried tiering-up to four stories high, with upper chamber over the brood chamber, and obtained 86 lbs. of extracted honey by the tiering plan, against 130 lbs. for the ordinary 2-story hive; he had easier access to the brood-chamber with the latter than the former. He encouraged building up a home market; he had sold, last fall, 4,000 lbs. of honey, at home. He considered Texas equal to any other State for its natural honey resources.

He opposed, in the strongest terms, the unjust and malicious attacks made by unprincipled men upon the character of the father of American bee literature—Rev. L. L. Langstroth, and regretted that any of the bee periodicals should give space in their publications for such malignancy.

The Association tendered a vote of thanks to Dr. Marshall for his able and interesting address.

The following committees were appointed:

On Resolutions—Dr. Howard, Jno. S. Kerr and G. R. Cooper.

On Apiarian Supplies and Exhibits—R. C. Horn, T. C. Boone and G. A. Wilson.

On Subjects for Discussion—W. K. Marshall, F. P. Cline and Judge T. C. Goodner.

Judge W. H. Andrews gave an interesting account of his visit to Lexington, Ky., as delegate from Texas to the North American Bee-Keepers' Society. He was highly pleased with the acquaintance made with the distinguished bee-masters of America whom he met there, and spoke in the highest terms of the ladies who participated in the convention and took such a great interest in bee culture. The manner in which the representative from Texas was received, and the attention given the Texas delegate was encouraging to the Society of Texas; which, though young as an organization, attracted much attention in the older States.

On motion, the Convention adjourned till 1:30 p. m.

AFTERNOON SESSION.

Committee on Subjects for Discussion reported the following questions:

"Which is most desirable—natural or artificial swarming?"

Dr. Marshall was selected to open the discussion. He favored artificial swarming; his apiary being located among large forest trees, natural swarming was impractical with him. He could increase artificially with less labor than natural swarming.

Judge Andrews favored natural swarming, he thought that his bees went to work with more spirit and zeal when allowed to swarm naturally.

Judge Goodner gave his experience with artificial swarming, as a novice. He succeeded in dividing his bees; received something less than 40,000 stings; it was his first effort, therefore he had not decided which plan he would adopt in the future.

The next subject for discussion was "Is it advisable to plant for honey?" Judge W. H. Andrews favored planting for honey, and recommended black locust. It was valuable for honey and the timber was useful and demanded a good price in the markets; it was a fast grower and a profuse bloomer.

Dr. W. K. Marshall was in favor of planting black locust, peas, Simpson's honey plant, and linden for honey. He stated that some peas yielded more honey than others, which was owing, perhaps, to the depth of the corolla of the flower, the nectar being secreted beyond the reach of the bee.

G. A. Wilson asked if it would pay to plant sweet clover (melilot).

Judge Andrews said that he had had it growing for several years, and had noticed, only occasionally, a stray bee upon it, but it was highly recommended by good authority.

Dr. Howard had grown it, and found his bees to work on it after horse-mint had dried up, and that it furnished a fine quality of honey, well flavored. He recommended planting and cultivating the first year, as it was to stand.

He was asked if it would do to cultivate the first year and transplant.

He gave his experience with transplanting a few thousand, year-old plants, that had been cultivated. He said that it took two pair of oxen to plow it up, and then a furrow had to be opened on either side of the row, and the plants plowed, or rather cut off, leaving most of the roots in the ground; that the laterals were very numerous and strong, and were three or four feet in length, and often an inch in diameter; the tap-roots were as large and perhaps as long. He dug two wagon loads of roots from the rows and left half of them in the ground. He plants an acre of ground from a pound of seed in this way, but considered too much unnecessary labor. He was asked if stock would eat it. He thought they would not; as they had free access to it, both cattle and horses, and had never seen anything eat it.

He was asked if there were more than one kind of it.

He said that two species were described, and by some three.

Dr. Marshall stated that horse-mint did not grow in his locality, asked what time it bloomed.

Dr. Howard answered that it usually commenced rather after the 20th of May, and lasted, when seasonable, over forty-five days, but that this year it would commence the first week in May, before the ratan vine was done, and it lasted, usually, more than forty-five days.

"Is the bee moth an enemy to the culture of the honey-bee?" was next discussed.

Dr. Marshall remarked that no one need to fear any losses from the ravages of the moth worm, if he kept strong colonies; that the worm would injure combs if allowed free access to them, could not be denied, but that no one need fear destruction. He thought that the Italians were more vigilant, and more apt to protect their homes against its ravages than were the blacks.

Judge Andrews said that the bee-moth was not to be feared among scientific bee-keepers, that all moth-proof hives and their vendors were humbugs. He spoke in positive terms against moth-traps.

Dr. Howard said that the natural food of the moth larva was wax, and not bees or honey, and that during the spring and summer months beeswax was liable to become infested with these larvæ, if exposed, and he regarded them as an enemy to bee-culturists, as they certainly destroy wax, and this article is becoming one of great importance. That comb honey should be noticed occasionally and fumigated with sulphur to destroy the larvæ; that strong colonies was the key-note to the successful protection of the hive—that a hive giving at all times free access to every part, furnished with a full colony of bees, with a vigorous laying queen, was absolutely moth-proof so far as the injurious inroads of this insect was concerned.

"The best method of transferring bees from old boxes to movable frame hives," was next discussed. Dr. Howard read an essay on "transferring bees," in which he gave the *modus operandi* at length.

"The best method of marketing honey" was next discussed.

Dr. Marshall thought that the cultivation of a home market was advisable, and should be encouraged. He had sold 4,000 lbs. at home, last fall.

All favored the cultivation of a home market, and putting up honey in an attractive shape, and convenient size, to suit the purchaser.

Adjourded till 9 a. m., to-morrow.

SECOND DAY—MORNING SESSION.

The meeting was called to order by Dr. Marshall. Judge W. H. Andrews read an essay on "bee literature—what it is and what it should be," in which he stripped the literature of the present, of its fallacies, its "fine spun theories" and ærial speculations, and dealt fairly and squarely with solid facts, and claimed that all deductions should be based upon the same solid basis. It was highly interesting.

The committee on subjects for discussion reported the following:

What is the best mode of Italianizing an apiary?

Judge Andrews gave his views and condemned the method described in the books. He then asked Dr. Howard to answer the question he had asked him to answer in the AMERICAN BEE-JOURNAL, to wit:

"Does the Dzierzon drone theory necessarily follow from the establishment of the much cherished idea of parthenogenesis?"

Dr. Howard answered the question, but the Judge rather accused him of being on the fence. The doctor said it was, to the scientific mind, a mooted point. He gave in detail many interesting experiments with bees. The anatomy of the queen under different circumstances, as revealed by the aid of the microscope, he dwelt on at length; all of which was interesting.

[For answer to Judge Andrews' question, see—"Review of the Dzierzon Theory," AMERICAN BEE-JOURNAL, Vol. xviii, p. 277.—SEC.]

The Judge admitted parthenogenesis so far as related to the production of drones from unfecundated mothers and no further. He related several interesting experiments in the breeding of other stock—cattle and hogs.

Is it advisable to import other races of bees than Italians? was discussed. It was the general expression that the Italians were superior to any other race yet introduced, all things considered; and the importation of other races was advisable.

AFTERNOON SESSION.

The election of officers for the ensuing year was held, which resulted as follows:

President—W. H. Andrews, of McKinney.

Vice President—W. K. Marshall, of Marshall.

Secretary—W. R. Howard, Kingston.

Treasurer—F. P. Cline, Mesquite.

Resolutions were passed, thanking Judge Andrews and the citizens of McKinney for hospitality; expressing sympathy with the Rev. L. L. Langstroth in his affliction; and thanking Dr. Marshall for his kind assistance and presence, and the exhibitors of apiarian supplies.

Adjourned to meet in April, 1883.

WM. R. HOWARD, *Sec.*

[The foregoing report has but just reached this office, on account of the Secretary being unable sooner to prepare it for publication.—ED.]

SELECTIONS FROM OUR LETTER-BOX

My Season's Work.—Bees are still working on mignonette and some drones are yet in the hives. Spring count, I had 17 colonies starving, I have now 57 colonies rich in honey; 3 being from the woods. My surplus is between 1,200 and 1,500 lbs. honey, one-half comb and half extracted. I am selling the comb at 20c; extracted at 25c. I received a package of Golden Honey Plant seed from Dr. Tinker, he having learned that seed purchased last spring failed to grow.

WM. CAMM.

Murraysville, Ill., Nov. 9, 1882.

My Report for 1882.—Number of colonies in the spring, 8 good and one weak; the good ones were as good or better as when they went into winter quarters; the weak one had a good young queen, but not one pint of bees. I built it up with brood from strong colonies. The early spring was good for bees, but April was cold and wet. I had to feed some to keep them breeding; fruit bloom did not amount to much, as we had some hard frosts, which killed it. White clover came on in due time and continued in abundance until September, but think that it did not yield much honey; just enough to keep bees breeding all the summer. Swarming commenced June 12, and they kept it up until September. Bees were stronger in numbers, but gave very little surplus honey. I winter them on the summer stands, packed in dry sawdust, 6 inches all around the hive and on top, and lost none. My increase by swarming was 21, and I put back 12 or 15 swarms. In September I doubled down to 21. I have now on the summer stands 5 packed in sawdust, same as last winter, 16 in double walled brick hives, with dead air space of one-inch between the brick walls; on the top, a cover of old carpet, and on that one foot of dry sawdust, covered with a good shingle roof. The idea of brick hives I obtained from the BEE-JOURNAL, but what number, or who wrote on the subject, I do not know, whoever it was, only spoke of brick hives and gave no description. So far I like them, but I may hate them next spring. One of our bee-keepers is brimstoning about one-half of his bees and taking the honey. Murder! murder!

ABE HOKE.

Union City, Ind., Nov. 5, 1882.

Packing Bees in Chaff.—Replying to the query on page 684 of W. W. Moore, of Gillette's Grove, Iowa, I would say that either through an error in writing, or through a misprint in the Canadian *Farmer*, my essay was not quite as intelligible in that portion of it as it might have been. It should have read:

"Then remove the cover and place on top of quilt, a cushion large enough to cover the frame, and containing about four inches thick of sawdust."

The better plan when using cushions is to have platforms or shelving, one above another, on the wall, and far enough apart to allow the hive, with cushion, to be set in; if, however, this method cannot easily be adopted, the strips can be placed upon the cushions, as described in my essay.

H. COUSE.

Beeton, Ont., Nov. 6, 1882.

Satisfactory.—My bees have done very well this season; they have increased 100 per cent., and I have taken 52 lbs. of honey per colony, nearly all in sections, which sold readily at 30c. per lb. My hybrids gave me the most honey, and the Italians the most increase. I get all my increase by natural swarming; and all are now in good condition for winter. I shall winter some in the cellar, and the others packed on the summer stands.

M. H. WOLFER.

Richmond, Ind., Nov. 4, 1882.

What Is It?—I inclose a peculiar kind of bug. Please give name. I can say that I have seen the silver lining edged with gold. I have still more honey to take off, as soon as the weather will permit.

W. G. MCLENDON.

Lake Village, Ark., Sept. 9, 1882.

[The bug was duly received, and sent to Prof. Cook for name, but we fear it was lost in the mails, as we have never heard anything of it.—ED.]

A Partial Report.—I had two small apiaries to care for this season. One was at my home in the village and the other (Mrs. Wirt's), a half mile from town, and a mile from where I reside. I did not keep an account of the yield from the home apiary, which consisted of 20 colonies, but am quite certain that I did not get quite as much honey as from the Wirt apiary, which numbered 19 colonies, spring count. I increased this apiary to 44 colonies by natural swarming, and as many as a half dozen swarms went to the woods. From this apiary I harvested just 2,000 pounds of comb honey, mostly in 2 lb. sections, and 600 lbs. of extracted. I used no foundation in the brood chamber, and only small starters in the sections; and some of the colonies had to be built up from six frames, with no honey, and being rather light in bees. Taking all the conditions into consideration, I believe I have no reason to complain of the result. My bees are all in excellent condition for winter, and I hope to get them through their long period of inactivity well prepared for the next season's campaign. I propose using foundation quite freely next season, if all goes well. Our honey is excellent and the home demand is good. I got one of Mr. Heddon's 8-frame Langstroth hives to try, and am of the opinion that I shall adopt it as my standard hive. I never like to jump at conclusions, but think it is the very hive I have been looking for. This year, as last, my best workers were a cross between the Italian and the black, or German bees. J. R. BAKER.

Keithsburg, Ill., Nov. 7, 1882.

Averaged 100 lbs. of Honey per Colony.—I commenced in the spring with 40 colonies of bees in fair condition. On the early-spring honey-flow I made all strong, and had my swarming on the ratan vine honey-flow, and all good and strong by the time our housemints came in, which was earlier this season than usual, connecting with the ratan-vine harvest. The season has been a good one in this portion of Texas. My entire apiary averaged 100 lbs. of extracted honey, per colony. My best colony gave one swarm, and the proceeds of both was a little over 400 lbs. of extracted honey. The fall harvest was good, and the honey was of better quality than usual. The honey plants furnishing our fall honey are different from what they have been heretofore, and the outlook for the future fall honey crop is favorable for a better quality of honey, if not a greater quantity. I now have about 90 colonies in good condition.

WM. R. HOWARD.

Kingston, Texas, Nov. 4, 1882.

To Prof. A. J. Cook.—Will you be kind enough to state in the AMERICAN BEE JOURNAL who made the Given foundation which you stated sagged so badly in your tests this summer? This is a matter that concerns *all* users of foundation, and I feel sure very many would be interested to know if the sagging is the result of an inherent defect in that make of foundation, or whether it was faulty manufacture? T. L. VONDORN.

Omaha, Neb., Nov. 4, 1882.

Bee Pasturage a Necessity.—We have just issued a new pamphlet giving our views on this important subject, with suggestions what to plant, and when and how. It is illustrated with 26 engravings, and will be sent postpaid to any address for 10 cents.

☞ When changing a postoffice address, mention the *old* as well as the new address.

☞ The New York Weekly *Tribune* says in regard to the Noyes Dictionary Holder, manufactured by L. W. Noyes, 99 West Monroe St., Chicago: "We know of but one satisfactory Holder; that, however, is so good that a second is not needed." Mr. Noyes sends to all applicants a handsome illustrated circular. Prices reduced.

Honey and Beeswax Market.

OFFICE OF AMERICAN BEE JOURNAL,
Monday, 10 a. m., November 13, 1882.

The following are the latest quotations for honey and beeswax received up to this hour:

Quotations of Cash Buyers.

CHICAGO.

HONEY—The supply of extracted honey is fully up to the demand. My quotations are: 6½c. for dark and 8½c. for light, delivered here.

BEESWAX—It is quite scarce. I am paying 27c. for good yellow wax, on arrival; dark and off colors, 17@22c.

AL. H. NEWMAN, 923 W. Madison St.

CINCINNATI.

HONEY—The market for extracted honey is very satisfactory. We have received within the last three weeks more than 200 bbls., principally from Louisiana, Mississippi and Florida, and the demand exceeds our experience and expectations. We have sold more than ever at this time of the year. Florida furnishes a honey which equals our Northern clover, and excels all the Southern honey I have had so far. There is some call for comb honey, but we have had no arrivals yet of a choice article. Comb honey brings 16@20c. on arrival; extracted, 7@10c. BEESWAX—Firm at 20@25c. per lb.

CHAS. F. MUTH.

Quotations of Commission Merchants.

CHICAGO.

HONEY—The demand increases with the cool weather, but not sufficiently fast to keep pace with receipts, which now accumulate, as it is time to get the surplus into market. Prices remain unchanged with perhaps a tendency downward, owing to many consignors desiring to realize quickly.

We quote: white comb, in small sections, 18@20c. Fine, well-filled, 1 lb. sections bring the outside price. Dark comb honey, little demand, 15@16c. Light honey, in larger boxes, 12@16c. Extracted—white clover, 9½@10c.; dark, 8@9c., in barrels and half-barrels. Kegs will bring but a small advance, if any, above half-barrels.

BEESWAX—Very scarce. Choice Yellow, 30c.; dark to fair, 20@24c.

R. A. BURNETT, 165 South Water St.

SAN FRANCISCO.

HONEY—There is considerable amber and dark and candied extracted offering. A small sale of light amber, in barrels, was made at 9c. For dark and candied extracted 7½c. is a full figure.

White comb, 18@20c; dark to good, 12@15c; extracted, choice to extra white, 9@10c.; dark and candied, 7½c.

BEESWAX—We quote 25@28c.

STEARNS & SMITH, 423 Front Street.

ST. LOUIS.

HONEY—Plentiful and slow. We quote, in lots, comb at 15@17c; strained at 6@7c.; extracted at 9@10c.

BEESWAX—Prime bright quotable at 26@27c.

R. C. GREER & CO., 117 N. Main Street.

CLEVELAND.

HONEY—The demand for comb honey, in sections, continues very good, at the following prices: Best quality white, in 1 lb sections, sells for 21@22c. per pound, in attractive packages. Same quality, in less attractive shape, 20@21c. In 1½@2 lb. sections, white, best quality, 19@20c. Second quality, of all grades, sells about 2 cents ₱ lb. less. Extracted, in small packages, tin pails and cans sells at 12@15c.; but extracted, in barrels, is slow at 9@12c.

BEESWAX—Prime quality, 25@28c.

A. C. KENDEL, 115 Ontario Street.

NEW YORK.

HONEY—The arrivals of honey are light, and some fancy lots held above quotations, but the actual demand is very slow.

We quote: White clover, fancy, small boxes, 19@20c; white clover, fair to good, 16@18c. Buckwheat, 13@16c.

BEESWAX—The supply of wax has been more liberal the past week, and 29@30c. about top prices for large cuts, though in a small way sales are reported 1@2c. higher.

Western, pure, 29@30c; Southern, pure, 30@31c.

D. W. QUINBY, 105 Park Place.

BOSTON.

HONEY—Sells very readily in 1 lb. sections at 22@25c. for best white, and 20@22c. for 1½ to 2 lb. Boxes containing ½ pound, 30c. per pound. Extracted is selling very slowly at 12@14c.

BEESWAX—25@26c.

CROCKER & BLAKE, 57 Chatham Street.

THE AMERICAN BEE JOURNAL

ESTABLISHED IN 1861

ADVERTISING RATES.

20c. per agate line of space, each insertion.

A line of Agate type will contain about **eight words**; fourteen lines will occupy 1 inch of space. Transient Advertisements payable in advance.

Special Notices, 50 cents per line.

DISCOUNTS will be given on advertisements published WEEKLY as follows, if the whole is paid in advance :

For	4 weeks	10	per cent. discount.
"	8 "	20	" "
"	13 " (3 months)	30	" "
"	26 " (6 months)	40	" "
"	39 " (9 months)	50	" "
"	52 " (1 year)	60	" "

Discount, for **1** year, in the MONTHLY alone, **25** per cent.,—**6** months, **10** per cent.,—**3** months, **5** per cent.—if wholly paid in advance.

Discount, for **1** year, in the SEMI-MONTHLY alone, **40** per cent.,—**6** months, **20** per cent.—**3** months, **10** per cent.—if wholly paid in advance.

Advertisements withdrawn before the expiration of the contract, will be charged the full rate for the time the advertisement is inserted.

THOMAS G. NEWMAN,

925 West Madison Street., **Chicago, Ill.**

Special Notices.

☞ A few of our subscribers are in arrears for the present year—having requested us to continue, and they would pay soon. Will all such please take this as a request to send on the two dollars with a renewal for next year, if possible.

☞ The Amerian Express Company money order system is the cheapest, safest and most convenient way of remitting small sums of money. Their rates for $1 to $5 are 5 cents; over $5 to $10, 8 cents. They can be purchased at any point where the company have an office, except Canada, and can be made payable at any one of the company's 4,000 offices.

For safety, when sending money to this office get either a post office or express money order, a bank draft on New York or Chicago, or register the letter. Postage stamps of any kind may be sent for amounts less than one dollar. Local checks are subject to a discount of 25 cents at Chicago banks.

Preparation of Honey for the Market, including the production and care of both comb and extracted honey, instructions on the exhibition of bees and honey at Fairs, etc. This is a new 10 cent pamphlet, of 32 pages.

Honey as Food and Medicine.

A new edition, revised and enlarged, the new pages being devoted to *new* Recipes for Honey Medicines, all kinds of cooking in which honey is used, and healthful and pleasant beverages.

We have put the price of them low to encourage bee-keepers to scatter them far and wide. Single copy 6 cents, postpaid; per dozen, 50 cents; per hundred, $4.00. On orders of 100 or more, we print, if desired, on the cover-page, "Presented by," etc., (giving the name and address of the bee-keeper who scatters them). This alone will pay him for all his trouble and expense—enabling him to dispose of his honey at home, at a good profit.

The Apiary Register.

All who intend to be systematic in their work in the apiary, should get a copy and commence to use it.

For 50 colonies (120 pages)	$1 00
" 100 colonies (220 pages)	1 50
" 200 colonies (420 pages)	2 00

The larger ones can be used for a few colonies, give room for an increase of numbers, and still keep the record all together in one book, and are therefore the most desirable ones.

CLUBBING LIST.

We supply the **American Bee Journal** and any of the following periodicals, one year, at the prices quoted in the last column of figures. The first column gives the regular price of both. All postage is prepaid by the publishers.

	Publishers' Price.	*Club*
The Weekly Bee Journal,	$2 00..	
and Gleanings in Bee-Culture (A.I.Root)	3 00..	2 75
Bee-Keepers' Magazine (A.J.King)	3 00..	2 60
Bee-Keepers' Exch'nge (Houk & Peet)	3 00..	2 80
Bee-Keepers' Guide (A.G.Hill)	2 50..	2 35
Kansas Bee-Keeper	2 00..	2 40
The 6 above-named papers	6 00..	5 50
The Weekly Bee Journal one year and Prof. Cook's Manual (bound in cloth)	3 25..	3 00
Bees and Honey, (T. G. Newman) "	2 75..	2 50
Binder for Weekly, 1881	2 85..	2 75
Binder for Weekly for 1882	2 75..	2 50

The Monthly **Bee Journal** and any of the above, $1 less than the figures in the last column.

☞ Constitutions and By-Laws for local Associations $2.00 per 100. The name of the Association printed in the blanks for 50 cents extra.

Advertisements intended for the BEE JOURNAL must reach this office by Saturday of the previous week.

☞ Postage stamps, of one, two or three cent denomination, accepted for fractional parts of a dollar; but money is preferred.

Kendall's Spavin Cure is used from the Atlantic to the Pacific coast.

The Monthly Bee Journal for 1883.

At the request of many who have heretofore taken the Monthly and Semi-Monthly BEE JOURNAL, we shall next year print a Monthly consisting of 32 pages, issuing it about the middle of each month, at $1.00 a year, in advance; 2 copies for $1.80; 3 copies for $2.50; 5 copies for $4.00; 10 or more copies at 75 cents each. An extra copy to the person getting up a club of 5 or more.

The Weekly is now permanently established, and will be continued as heretofore.

The Weekly and Monthly BEE JOURNALS will be distinct papers, each having its own sphere of operation and different readers.

We shall aim to make the Monthly BEE JOURNAL a welcome and profitable visitor to the homes of those who feel the need of a cheap, first class, reliable bee paper in pamphlet form—whose time is too much occupied to read a weekly, or whose means or requirements are more limited, and who can dispense with the routine matter more properly belonging to a weekly.

Emerson Binders—made especially for the BEE JOURNAL, are lettered in gold on the back, and make a very convenient way of preserving the BEE JOURNAL as fast as received. They will be sent, post-paid, for 75 cents, for the Weekly; or for the Monthly, 50 cents. They cannot be sent by mail to Canada.

☞ The BEE JOURNAL is mailed at the Chicago Postoffice every Tuesday, and any irregularity in its arrival is due to the postal employes, or some cause beyond our control.

Sample Copies of the AMERICAN BEE JOURNAL will be sent *free* to any person. Any one intending to get up a club can have sample copies sent to the persons they desire to interview, by sending the names to this office.

Ribbon Badges, for bee-keepers, on which are printed a large bee in gold, we send for 10 cts. each, or $8 per 100.

Every lady should send 25 cents to Strawbridge & Clothier, Philadelphia, and receive their *Fashion Quarterly* for six months. 1,000 illustrations and four pages new music each issue.

☞ Do not let your numbers of the BEE JOURNAL for 1881 be lost. The best way to preserve them is to procure a binder and put them in. They are very valuable for reference.